Please type a plus sign (+) inside thi
--

+	

PTO/SB/08B (10-96)
oved for use through 10/31/99. OMB 0651-0031
Patent and Trainard Ark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

Application Number

Filing Date TBA

First Named Inventor Herewith

Group Art Unit Unknown

Examiner Name Unknown

Attorney Docket Number 89589.113000

(use as many sheets as necessary)

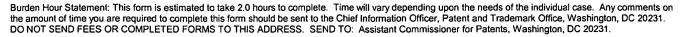
STATEMENT BY APPLICANT

Sheet 1 of 2

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS		1
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	1
S.A	1	Tomasi, Carlo, et al., "Shape and Motion From Image Streams Under Orthography: A Factorization Method", International Journal of Computer Vision, Vol. 9, No. 2, pp. 137-154, (1992).	~	
1	2	Terzopoulos, et al., "Analysis and Synthesis of Facial Image Sequences Using Physical and Anatomical Models", IEEE Transactions on Pattern Analysis and Machines Intelligence (PAMI), Vol. 15, No. 6, pp. 569-579, (June 1993).	ν	
	3	Essa, Irfan A., et al., "A Vision System for Observing and Extracting Facial Action Parameters", Proceedings of CVPR, Seattle, Washington, pp. 36-42 & 76-83, (June 1994).	V	ł
ē - <u>-</u>	4	Smolic, Aljoscha, et al., "Real-Time Estimation of Long-Term 3-D Motion Parameters for SNHC Face Animation and Model-Based Coding Applications", <u>IEEE Transactions on Circuits and Systems for Video Technology</u> , Vol. 9, No. 2, pp. 255-263, (March 1999).	~	
	5	Yokoya, Naokazu, et al., "Motion Tracking of Deformable Objects by Active Contour Models Using Multiscale Dynamic Programming", <u>Journal of Visual Communication and Image Representation</u> , Vol. 4, pp. 382-391, (December 1993).	~	ŀ
	6	Bascle, Benedicte, et al., "Tracking Computer Primitive in An Image Sequence", <u>IEEE International Conference Pattern Recognition</u> , Israel, pp. 426-431, (October 1994).	V	
	7	Meyer, Francois G., et al., "Region-Based Tracking Using Affine Motion Modes in Long Image Sequences", CVGIP: Image Understanding , Vol. 60, pp. 119-140, (September 1994).	V	
	8	Antoszczyszyn, Paul M., et al., "Tracking of the Motion of Important Facial Features in Model-Based Coding", Signal Processing, No. 66, pp. 249-260, (1998).	~	ļ
	9	Petajan, Eric, Dr., "Very Low Bitrate Face Animation Coding in MPEG-4", <u>Lucent Technologies Technical Report</u> , pp. 1-33.	~	ł
	10	Isard, Michael, et al., "Contour Tracking by Stochastic Propagation of Conditional Density", <u>Proceedings of European Conference on Computer Vision</u> , Cambridge, UK, pp. 343-356, (1996).	~	
	11	Bascle, B., et al., "Separability of Pose and Expression in Facial Tracking and Animation", <u>Proceedings of 6th International Conference on Computer Vision</u> , pp. 323-328, (1998).	V	1
V				

Examiner Signature Suppr Date Considered 7,24,03

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.



^{*}EXAMINER: Initial if reference considered, mether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Please typ	e a plus	sign (+)	inside this
------------	----------	----------	-------------

_	
_	

PTO/SB/08B (10-96)

oved for use through 10/31/99. OMB 0651-0031

Patent and Track Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitu	FORMATION DISCLOSURE Application Number TBA Filing Date Herewith	mplete if Known				
		-		Application Number	ТВА	
INF	ORMATIO	N D	ISCLOSURE	Filing Date	Herewith	
STATEMENT BY APPLICANT	First Named Inventor	A. Tanju Erdem	0			
•			/ li ! Li O / li ! !	Group Art Unit	Unknown	7. 三
	(use as many	sheets	as necessary)	Examiner Name	Unknown	
Sheet	3	of	3	Attorney Docket Number	89589.113000	ō

			臺
		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
7. H	12	Blake, Andrew, et al., "3D- Position, Attitude, and Shape Input Using Video Tracking of Hands and Lips", Computer Graphics (SIGGRAPH 1994), pp. 185-1992, (1994).	و
S.A ,S.A	13	Toyama, Kentaro, "Prolegomena For Robust Face Tracking", Microsoft Research Technical Report, MSR-TR-98-65, pp. 1-15, (November 13, 1998).	1
,S.A	14	Terzopoulos, D., et al., "Tracking and Kalman Snakes", Active Vision, (Ed. A. Blake and A. Yuille), pp. 3-20, (1992).	6
			į
			<u> </u>
	-		_
Examine Signature		Sem an Date Considered 7,24,03	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

٠.	•	•			89589.1130		09/6	89,585	
	INFO	, RMATION DISCLOSUR (Use several sheets if necess	E CITATION	Pile	Applicant(s) A. Tanju Erdem	9-2			
		(obe several shoots ly necess	#P71	;	Filing Date		Group Art Unit		. set
	-		4 0005 S O	AON	October 12, 2	2000	Un	kanown b	600
			100	U.S. PAT	ENT DOCUMENTS				
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	···	NAME	CLASS	SUBCLASS	FILING IF APPRO	
\$.A	12	5,907,626	05-25-1999	Toklu e	t al.				
	13	5,807,284	09-15-1998	Foxlin			APR Technology	CELL	
	14	5,805,745	09-08-1998	Graf			Terra	200	Ò
	15	5,802,220	09-01-1998	Black e	t al.	1	Sinology (~ <001	
	16	5,774,591	06-30-1998	Black e	t al.			"er 2600	0
	17	5,744,953	04-28-1998	Hansen					
	18	5,280,530	01-18-1994	Trew e	t al.				
V	19	4,975,960	12-04-1990	Petajan					
			_	FOREIG	N PATENT DOCUMENTS	5			
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Transl YES	ntion NO
i									
3 - 6									
				OTHER	DOCUMENTS (Including	ig Author, Title, I	Date, Pertinent Pa	ges, Etc.)	
		/ 1.00							
EXAMINE	R 🗴				DATE CONSIDERED				
	<u> </u>	mo	4		7.29				_
		al if citation considered, whethe clude copy of this form with nex			nce with MPEP Section 609	; Draw line throu	igh citation if not	in conforma	nce and
orm PTO	4000			909	A/REV04	Patent and Tradem	ark Office * U.S. DEP	ARTMENT OF	COMMERCE

	,	, ,		89589.113000		09/6	689,595	
	INFO	RMATION DISCLOSURE: (Use several sheets if pece) said	CHATION	Applicant(s) A. Tanju Erdem	•			
		70	.C./	Filing Date		roup Art Unit		1.40
HOV 0 2 2000 S October					0	Un	known 16	L₩
			<i>E</i>	U.S. PATENT DOCUMENTS				
EXAMINER INITIAL	REF	DOCUMENT NUMBER WAS	RADEMARTE	NAME	CLASS	SUBCLASS	FILING DAT	
S.A	1	6,064,390	05-16-2000	Sagar et al.	345	420		
	2	6,052,132	04-18-2000	Christian et al.				
	3	6,047,078	04-04-2000	Kang		AD.	R 2 6 2001	<u>D</u>
	4	6,037,949	03-14-2000	DeRose et al.		Technolo	7 2 6 2001	·
	5	6,031,539	02-29-2000	Kang et al.		1.010(' ² 6 2001 By C _{enter 26}	00
	6	6,028,960	02-22-2000	Graf et al.				
	7	6,020,892	02-01-2000	Dillon				
	8	6,016,148	01-18-2000	Kang et al.				
	9	6,009,210	12-28-1999	Kang				
	10	5,982,909	11-09-1999	Erdem et al				
\downarrow	11	5,923,337	07-13-1999	Yamamoto				
				FOREIGN PATENT DOCUMENTS		,		
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	NO NO
								_
		-						
				OTHER DOCUMENTS (Including A	uthor, Title, D	ate, Pertinent Pa	ges, Etc.)	
						-		
								Α
EXAMINE	5	en fri		DATE CONSIDERED 7,24,03				
		al if citation considered, whether o clude copy of this form with next c		conformance with MPEP Section 609; Dr	aw line throug	gh citation if not	in conformance	e and
orm PTO						rk Office * U.S. DEP	A DIMENT OF COM	MERCE

U.S. Patent and Tradema

CE: U.S. DEPARTMENT OF COMMERCE nder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet of

Complete if Known					
Application Number	09/689595				
Filing Date	October 12, 2000				
First Named Inventor	A. Tanju Erdem				
Art Unit	2671				
Examiner Name	Cliff N. Vo				
Attorney Docket Number	89589.113000				

				U.S. PATE	ENT DOCUMENTS	
	Cite	Document	Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant
Initials*	No.1	Number	Kind Code (if known)	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				RECEIVED
		US-				
		US-			<u> </u>	MAR 1 9 2003
		US-				
		US-		-		Technology Center 2600
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-			· · · · · · · · · · · · · · · · · · ·	

				FOI	REIGN PATENT DO	CUMENTS		
Examiner Initials*	Cite No.1	Office	Foreign Patent Doo Number ⁴	Kind ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
N.A	1	EPO	PCT/IB01/02735		06-21-2002	International Search Report		\top
SA	2	EPO	PCT/IB01/02363		08-07-2002	International Search Report		
S.A	_3	EPO	PCT/IB01/02736		07-12-2002	International Search Report		1
rs.A	4	wo	WO 9906962 A	<u> </u>	02-11-1999	Pixar Animation Studios		_
S./ 	5	EPO	EP 0 926 628 A		06-30-1999	Fujitsu Ltd.		
$\leq A$	6	JP	JP 8293026 A		11-05-1996	Murata Kikai KK		\top
S.A	7	wo	WO 98 01830		01-15-1998	Pincemail Cecile;British Tele		1
							·	#

				
Examiner ()		Date		$\overline{}$
	, `	Date		,
Signature	/wm	I Considered	1.74.03	
	//		1127/07	/

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at <u>www.uspto.gov</u> or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. Applicant is to place a check mark here if English language Translation is attached.

PTC/SB/08B (10-01)
Appropriate through 10/31/2002. OMB 0651-0031
U.S. Patent and Tradems office: U.S. DEPARTMENT OF COMMERCE

Complete if Known

Index Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 09/689595

Filing Date October 12, 2000

First Named Inventor A. Tanju Erdem

Group Art Unit 2671

Examiner Name Cliff N. Vo

SIAIEMENT BY APPLICANT

Group Art Unit 2671

(use as many sheets as necessary)

Sheet 2 of 2 Attorney Docket Number 89589.113000

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
5.4	8	LI-AN TANG ET AL: "Analysis-based facial expression synthesis" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE OF IMAGE PROCESSING (ICIP) AUSTIN, NOV. 13-16, 1994 LOS ALAMITOS, IEEE COMP. SOC. PRESS, US, vol. 3 CONF. 1, Nov. 13, 1994, pages 98-102 XP010146456 ISBN: 0-8186-6952-7 the whole document	b
	9	COSI P ET AL: "Phonetic recognition by recurrent neural networds working on audio and visual information" SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 19, no. 3, Sept. 1, 1996, pages 245-252, XP004013654; ISSN: 0167-6393 page 246, right hand column, line 13-page 248, right-hand column, line 7	~
	10	GUENTHER, BRIAN; GRIMM, CINDY; WOOD, DANIEL; MALVAR, HENRIQUE; PIGHIN FREDRICK: "Making faces" COMPUTER GRAPHICS, PROCEEDINGS. SIGGRAPH 98 CONFERENCE PROCEEDINGS, PROCEEDINGS OF SIGGRAPH 98: 25TH INTERNATIONAL CONFERENCE ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, ORLANDO, FL,	V
		USA, 19-24 JULY, 1998, pages 55-66, XP002205956 1998, New York, NY, USA, ACM, USA ISBN: 0-89791-999-8 page 56, paragraph 2 -page 59, paragraph 3.3.3	
	11	EBIHARA K ET AL: REAL-TIME 3-D FACIAL IMAGE RECONSTRUCTION FOR VIRTUAL SPACE TELECONFERENCING" ELECTRONICS & COMMUNICATIONS IN JAPAN, PART III-FUNDAMENTAL ELECTRONIC SCIENCE, SCRIPTA TECHNICA, NY, US, vol.82, no. 5, May 1999, pgs. 80-90, XP000875659 ISSN:1042-0967 pg 80, left-hand column, line 1-pg. 81, rt-hand col, ln 5	V
	12	CHEN T: "Technologies for building networked collaborative environments" IMAGE PROCESSING, 1999. ICIP 99. PROCEEDINGS. 1999 INTERNATIONAL CONFERENCE ON KOBE, JAPAN 24-28 OCT. 1999, PISCATAWAY, NJ, USA, IEEE, US, Oct. 24, 1999, pages 16-20, XP010368845, ISBN: 0-7803-5467-2, page 18, paragraph 2.3-page 19, paragraph 2.4	1
	13	LANDE C ET AL: "An MPEG-4 facial animation system driven by synthetic speech" MULTIMEDIA MODELING, 1998. MMM '98. PROCEEDINGS. 1998 LAUSANNE, SWITZERLAND 12-15 OCT.1998, LOS ALAMITOS, CA. USA, IEEE COMPUT. SOC. US, Oct. 12, 1998, pages 203-212, XP010309519, ISBN: 0-8186-8911-0, pg. 1, left-hand column, line 1-page 207, right-hand column, line 30	A.
	14	LAVAGETTO F ET AL: "THE FACIAL ANIMATION ENGINE: TOWARD A HIGH-LEVEL INTERFACE FOR THE DESIGN OF MPEG-4 COMPLIANT ANIMATED FACES" IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, IEEE INC. NEW YORK, US, vol. 9, no. 2, March 1999, pages 277-289, XP000805532, ISSN:1051-8215 page 278,	~
		left-hand column, line 11-line 22; page 279, left-hand column, line 23-page 282, left-hand column, line 39	
		RECEIVED	
		MAR 1 9 2003	
		Technology Center 26	00
	l		<u> </u>

Examiner	\bigcirc .	/ .	Date	
Signature	Sem,	/m	Considered	7,24,03

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.